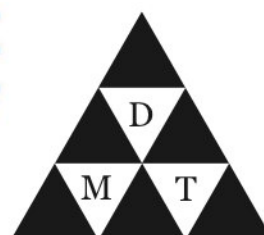


MTI Follow-Up Webinar

Ratio and Proportional Reasoning

Grades 6-8



Michele Carney and Gwyneth Hughes

Suggestions for usage

This webinar is designed to assist teachers, administrators, and instructional coaches in investigating students' development of proportional reasoning.

Materials Needed

A recording of the Proportional Reasoning webinar to project or share with participants. Ensure you have audio for the archived webinar.

Teachers should have paper and pencil.

Procedures and Discussions

- 1. As a facilitator, you may want to pause after each task to allow participants time to work on and discuss their strategies and models. Review the Extension section if you want to do more focused discussion at those times.**
2. Begin the Webinar.
3. After slides comparing the current Idaho State Standards to the Common Core State Standards, you may want to pause to give participants time to reflect on the implications these new standards have for our teaching mathematics in general and ratio and proportional reasoning in particular.
4. After the slides on student thinking (additive, scaling up, and scaling down) participants might discuss what types of problems they would give students to see what type of reasoning they are using.
5. At the end of the section on Linear Equations (After the green grade-level textboxes) participants might discuss in more depth what models or representations are expected at their grade level.

Extensions

1. After the slide on Composed Unit v. Multiplicative Comparison Give participants time to discuss how the number sets in the examples shown encourage one strategy over the other. Allow them to design their own tasks where the number sets would encourage students to use either a composed unit strategy or a multiplicative comparison strategy.
2. Examine why the cross multiplication algorithm works by looking at one of the hiking club problems.